

## Adaptive Management Set-Up Phase Step 3: Management Actions



## Characteristics of useful actions

- Span a sufficient range of system responses and produce different outcomes
- Feasible within legal, fiscal, and socio-political constraints
- Limited in number to:
  - Facilitate analysis
  - Enhance learning
  - Minimize costs
- Under reasonable control of the manager

## Actions: take-home messages

- Objectives answer “Why?” Management actions answer “How?”
- A useful set of possible actions requires interaction among stakeholders, managers, and scientists
- Useful actions are limited in number, and span the range of desirable outcomes and maximize differences in system responses
- As with objectives, the set of actions may not be immediately obvious

## **Adaptive Management Alternatives and NEPA**

## **Management Actions**

- Management Actions are the NEPA Alternatives that must be developed
- The range of alternatives is limited by the purpose and need for action
- If the purpose and need statements are written too narrowly then they will constrain the number of alternatives that can be considered.

## **Actions and Alternatives**

- Stand Alone Actions or Suites of Actions
- Suites of Actions:
  - Spatially Separated
  - Temporally Separated

## **Spatially Separated Actions**

- Case Study 4: The Five Rivers Landscape Management Plan
- Used a suite of different prescriptions in different areas:
  - Passive Management
  - Light Touch Thinning
  - Heavy Thinning

## **Temporally Separated Actions**

- Actions that take place in a sequential order based on monitoring results
- Deer/Forest Example
  - Reduce Deer Density (and monitor for results)
  - Reduce insect infestation (while maintaining deer)
  - Conduct timber thinning
  - Implement prescribed burns

## **Temporally Separated Actions**

- Each action is testing the limiting factors of forest regeneration over time informed by monitoring.

## **NEPA Analysis**

- Predict and analyze environmental impacts of all actions, including future actions that may be implemented based on monitoring data
- Thoroughly analyze any cumulative or synergistic effects
- Clearly articulate how and when changes to management actions will likely take place (i.e., develop a framework)